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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,079	04/29/2002	Julian Carter	29610/CDT096	6353

7590

07/09/2003

James P Zeller  
Marshall Gerstein & Borun  
233 S Wacker Drive  
6300 Sears Tower  
Chicago, IL 60606

EXAMINER

BERCK, KENNETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,079

Applicant(s)

CARTER ET AL.

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-9, 11-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by VanSlyke et al. (US 5059862).

Regarding claim 1, VanSlyke discloses an EL device with a first electrode, a second electrode and a light-emissive region between the electrodes, the first electrode having a first material (104) and a second material (106) and the second electrode comprises a third material (116) and a fourth material (112).

Regarding claim 6, VanSlyke discloses at least one of the first and second electrodes is light-transmissive (column 3, lines 24-40).

Regarding claim 7, VanSlyke discloses at least one of the first and third materials is gold or platinum (column 6, lines 20-30).

Regarding claim 8, VanSlyke discloses at least one of the second and fourth materials is an alkali metal or an alkali earth metal or an oxide or fluoride of an alkali metal or an alkali earth metal (column 11, lines 40-67).

Regarding claim 9, VanSlyke discloses at least one of the first and third materials has a work function above 4.0eV (claims).

Art Unit: 2879

Regarding claim 11, VanSlyke discloses the first and third materials are the same.

Regarding claim 12, VanSlyke discloses the second and fourth materials are the same.

Regarding claim 13, VanSlyke discloses (fig 1) a drive unit electrically connected to the first and second electrodes.

Regarding claim 14, VanSlyke discloses a charge transport layer of an electrically conductive material between at least one of the electrodes and the light-emissive region.

Regarding claim 16, VanSlyke discloses a method of driving an electroluminescent device by applying an AC scheme to the electrodes.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-5, 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanSlyke et al. (US 5059862) in view of Aziz et al. (US 6392250).

VanSlyke discloses all of the above claim limitations but fails to clearly point out the co-deposited third and fourth material being present at the surface of the electrode.

Art Unit: 2879

Regarding claims 2-5 and 18, Aziz discloses (column 12-13) the co-deposited third and fourth material being present at the surface of the electrode in order to form the electrode and supply power to the device.

Regarding claim 10, Aziz discloses at least one of the second and fourth materials has a work function below 3.5eV in order to form the electrode and supply power to the device.


Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the device of VanSlyke with the third and fourth material being present at the surface of the electrode and one of the second and fourth materials has a work function below 3.5eV in order to form the electrode and supply power to the device, as taught by Aziz.

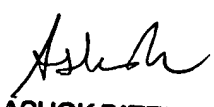
### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab   
June 26, 2003

  
ASHOK PATEL  
PRIMARY EXAMINER